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Sauleen Shamdeen

Fall Research and Creative Activity Open House



The Undergraduate Research Center hosted our 3rd annual Undergraduate Research and Creative Activity Open House as a hybrid event on November 10 from 11-1pm in the Science Building atrium, 2nd floor. The event was presented in accordance with COVID-19 guidelines.

The Open House showcased research and creative activity posters from a variety of disciplines including geosciences, art & design, biology, chemistry, health & human performance, psychology, English, history, computer science, mathematics, animal science, and nursing.

Story continued on page 2.



DID YOU KNOW?

The URC has a facebook page! Follow us:

Undergraduate Research Center at MTSU or click the facebook icon for updates and stories.

URC'S MISSION

The Undergraduate Research Center's (URC) mission is to be the central hub for communication about undergraduate research grant programs and other related opportunities on and off campus, to distribute university funds for undergraduate research and creative projects, and to promote dissemination of results through travel grants and by offering opportunities for students to present their research findings.

Fall Open House

For students and faculty who could not attend the live event, the Student Organization for the Advancement of Research (SOAR) also hosted a virtual platform through *Symposium* showcasing the presenter's academic poster, a brief presentation, and the ability for viewers to post comments and questions related to individual projects.

According to analytics provided by Symposium, the Open House hosted 135 virtual visitors with 1,978 poster/presentation views. The top five most viewed posters include:

- #1: *Officer Workload and Officer-Involved Shootings of Unarmed Decedents* by Dara Zwemer;
- #2: *A Creative Expression of Women's Anger* by Katrina Scott;
- #3: *Vanderbilt* by Emily McTyre;
- #4: *Exploration of Aurone System in Mercury Sensing* by Koda Hengstenberg;
- #5: *Assessment of Cannabinoid Levels in Successively Cloned Generations of Industrial Hemp (*Cannabis sativa*)* by Shelby Cox

Thanks to all who attended the in-person event or virtually. We appreciate your support!

To view a complete list of presenters and more pictures, please visit our [website](#).

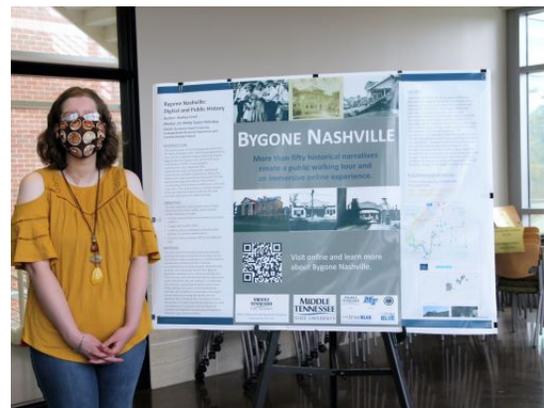
Photo credits: Casey Penston



Presenter: Gabrielle Mould



Presenter: Katrina Scott



Presenter: Audrey Creel



NEWS + UPCOMING EVENTS

URECA Deadlines for Spring and Summer 2021



Spring 2021: Thursday, January 28th

Applications must be submitted by 4:30pm



Summer 2021: Thursday, March 25th

Applications must be submitted by 4:30pm

NEW Requirements for Scholar Applicants

What else does the URECA committee need to know about the student's ability to perform the proposed research or creative project at the level for a Silver, Gold, or Platinum award?

The committee encourages applicants to submit evidence including, as appropriate, one or more of the following:

- Letter(s) of support from previous research or project mentor(s);
- Examples of creative works or resume/curriculum vitae (CV);
- Brief description of relevant work experience or research experience;
- and/or List and brief descriptions of courses that have prepared you for the proposed project.

Please note: Scholar applicants without a prior URECA award will need to submit a letter of support from their previous research or project mentor(s) and either an example of previous creative works for creative activity applicants or a resume/CV for research applicants.

To review the full application guidelines for Scholar proposals, please visit our [website](#).

NCUR 2021 @Home

Thanks to all the students who submitted abstracts for NCUR 2021. A list of accepted abstracts will be posted as soon as possible.

Upcoming Workshop

Author Workshop: How to Write a Great Research Paper, Use and Share Your Data Responsibly, and Get Published

Please join Dr. Angela Mertig, MTSU professor and member of the editorial board of the Journal of Environmental Psychology, and David Parsons, from Elsevier, next Thursday, December 3, 2020, from 2:00pm - 3:00pm for an author workshop.

In this workshop the presenters will discuss identifying the right journal, navigating data repositories, structuring your article, data reuse and publication, understanding the peer review process, open access publishing, publishing ethics, how to get your research noticed, and responsible sharing.

Register at:

<https://mtsu.libcal.com/calendar/events/elsevier>

Presented by Walker Library

FEATURED SOAR STUDENT

SAULEEN SHAMDEEN
SENIOR

Major: Biochemistry

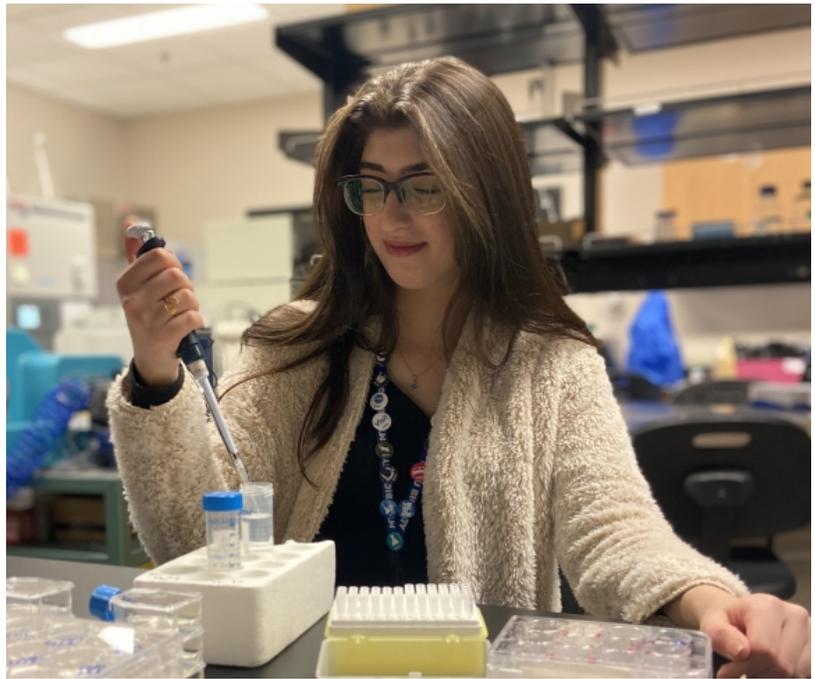
Faculty Mentor: Dr. Tony Farone

Current Research Focus: Survey of Mosquito Predatory Ciliate *Lambornella* for Potential Biological Control

Project Description: The purpose of this study is to identify, isolate, and culture *Lambornella clarki* to utilize as a potential biological mosquito control. The ciliated protozoa, *Lambornella clarki* and other *Lambornella* species, are known to target mosquitoes, specifically mosquito larvae and essentially killing them off. In order to achieve these results, we collected numerous water samples from a variety of locations, performed various isolation techniques, cultured them in various mediums, as well as performed molecular identification techniques to confirm the identity of the ciliate. Once *Lambornella* has been identified and cultured, it will serve great benefit as a natural biological mosquito control that is not harmful to humans as opposed to common chemical agents.

Why does this topic interest you?

Mosquitoes are known for being one of the main hosts in the transmission of various diseases, including malaria, ZICA virus, West Nile virus, yellow fever, etc. With the current concern over mosquito-borne viral infections, it is worth revisiting the possibility of growing *Lambornella* for biological control applications that won't harm humans as other preventing treatments do.



Acknowledging that there is a lack of information on *Lambornella* itself gives a challenge for me which in a way is something I enjoy because there is always something to look forward to with this topic. Also, the hope that there is a possibility that we could be either the only one or the only one of the few that have identified and cultured *Lambornella* is exciting.

Do you have any advice for future researchers?

Be curious and do your background research on what you want to research. Be aware and understand the objective the research you want to pursue. Always expect the unexpected - you can never prepare for everything that happens during research. Research is a door that you can open that allows you to experience many subjects as well as make you aware of what kind of future you would want. However, with learning and experiences comes responsibility. Be sure to understand the importance of what kind of work is needed and to not lose interest when the results aren't achieved as fast as you want them to. Research requires both patience and time as well as willingness to make it enjoyable and a great experience. Lastly, never be afraid to ask questions - it's okay not to know everything. If the thought of research comes up in your mind, then ask around and you can gain the opportunity for a new experience!



questions or comments?
We welcome them!